



BP Products North America Inc.
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USA

November 14, 2014

Director, Air Enforcement Division
Office of Civil Enforcement (2242A)
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
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Office of Regional Counsel
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**Re: United States, et.al. v. BP Products North America Inc.
 Northern District of Indiana, Hammond Division
 Civil Action No. 2:12 CV 207
 Emissions and Flare Combustion Efficiency Test Results**

EPA ACTION REQUIRED

As required by Appendix D, ¶ 38 of the BP Whiting Consent Decree (CD), BP conducted Passive FTIR testing on the Whiting ALKY and DDU flares from July 10th to July 16th, 2014. The results of the flare testing is required to be submitted to EPA by November 16, 2014 which is no later than four months after completing the testing. Pursuant to Appendix D, ¶ 39 of the CD, enclosed is the Emissions and Flare Combustion Efficiency Test Report which includes the following:

- The detailed results of the testing done pursuant to Paragraph 38 that includes minute by minute electronic data in Excel format for all measurements and process data and is consistent with the requirements of Appendix FLR-17.
- A detailed description of the extent to which the NHV_{cz} affects Combustion Efficiency.
- A detailed description of the range of the NHV_{cz} that the Covered Flares must be operated at to ensure 98% Combustion Efficiency, taking into consideration variability in Vent Gas flow rate.
- The "A" Combustion Efficiency Multiplier set forth in FLR-3 for calculating the $NHV_{cz-limit}$ at which BPP proposes to operate the Covered Flare in order to achieve a Combustion Efficiency of no less than 98% on a continuous basis.
- A detailed evaluation of whether the results of the testing at the Covered Flare that is the subject of the report impact the "A" Combustion Efficiency Multiplier for calculating the $NHV_{cz-limit}$ at the six Covered Flares that will not be subject to Passive FTIR testing.

Based on the results described in detail in the attached PFTIR test report, BP proposes that the "A" Combustion Efficiency Multipliers used in calculating the $NHV_{cz-limit}$ in Equation 4 of Appendix FLR-3 for the Alky Flare and

the VRU Flare is 4.5, and for the DDU Flare and FCU Flare is 3.0. These proposed values are higher than what is shown by testing to be adequate to assure high combustion efficiency, and incorporate an additional margin of safety. For the four other Covered Flares (South Flare, GOHT Flare, 4UF Flare and UIU Flare), the test results support a proposal for the "A" Combustion Efficiency Multipliers to be less than the DDU flare since these flares have higher NHVvg and lower LFLvg. However, BP proposes that the "A" Combustion Efficiency Multipliers of 3.0 for these flares to provide a substantial margin of assurance that adequate combustion efficiency will be achieved under all conditions. However, after EPA promulgates the Refinery Sector Rule, BP Whiting will re-evaluate the Passive FTIR test results in light of the promulgated refinery flare combustion efficiency requirements, and may propose changes to consolidate the Refinery Sector Rule obligations with the Consent Decree requirements.

If you require additional information, please contact Rohini Sengupta at (219) 473-2110.

Sincerely,



Linda Wilson
Environmental Manager
BP Whiting Business Unit

Attachment

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Submitted hard-copy:

cc w/o attachment:

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Reference Case No. 90-5-2-1-09244

cc w/ attachment:

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Distribution of an enclosed flash drive with the test data and video is limited to the following:

Director, Air Enforcement Division, OECA

Compliance Tracker - U.S. EPA, Region 5

Matrix New World Engineering, Inc.

Chief, Air Compliance and Enforcement Branch, IDEM